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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,269	10/02/2003	Jari Mäkinen	059864.01114	3464
32294 7590 04/24/2009 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER				
HAN, QI				
ART UNIT		PAPER NUMBER		
2626				
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04/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,269

Applicant(s)

MAKINEN, JARI

Examiner

QI HAN

Art Unit

2626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-21, 39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 39 is/are allowed.
- 6) ☒ Claim(s) 17, 19-21 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

2. This communication is responsive to the applicant's amendment dated 01/16/2009. The applicant(s) amended claims 1, 17 and 39-40 (see the amendment: pages 2-9).

The examiner withdrew the claim rejection under 35 USC 102/103, because the applicant made the corresponding amendments and arguments, which overcome the previous prior art rejection.

Response to Arguments

3. Applicant's arguments filed on 01/16/2009 with respect to the claim rejection under 35 USC 101 and 112 1st have been fully considered but they are not persuasive, even though the arguments are based on the newly amended claims that introduce new issue/new matter and/or change the scope of the claims.
4. In response to applicant's arguments regarding claim rejection under 101 (see Remarks: page 10, p(paragraph)3 to page 11, p2), the examiner disagrees with the applicant's arguments because the newly amended limitations including argued "encoding via at least on state of a transceiver..." does not change the claim in nature that "the claimed "computer-readable

medium" may be broadly directed to carrier wave or communication medium, which is non-statutory", as rejected in the previous office action.

5. In response to applicant's arguments regarding claim rejection under 112 1st (see Remarks: page 11, p3 to page 13, p2), the examiner disagrees with the applicant's arguments because of following reasons.

Regarding claim 17 (also applied to claim 19-21), the claimed "**a processor** configured to calculating values for ..." is not specifically described in the original specification. It is noted that the contents of the specification (page 17, lines 10-17, Figs. 2-3) referenced in the arguments (Remarks: page 10, p4 to page 11, p2), **do not fully** support the argued and amended limitation(s). It is also noted that even in the related art, the term of "processor" may refer to different well-known subject matters with different scopes (such as CPU, DSP, word processor), so that the specification should be treated as a whole to decide whether or not a amended subject matter is fully supported by the corresponding scope of the specification disclosure. In this case, the applicant failed to provide sufficient evidence for the full support, so that the arguments cannot overcome the rejection.

Regarding claims 40, with the same principle as stated above, the claimed limitation "computer readable medium" is **not specifically described** in the original specification, and the contents of the specification (page 26, line 10 and Fig. 7) referenced in the arguments (Remarks: page 10, p4 to page 11, p2), **do not fully** support the amended limitation(s). Clearly, the argued and recited disclosure "storing the parameters in suitable configured medium such as in a

memory or a buffer” in the specification, **as a whole**, does not fully support “a computer program embodied on a computer-readable medium...” as claimed.

For above reasons, the corresponding claim rejections are sustained.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 40 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 40, it recites “a computer program embodied on a computer-readable medium ...”. Since it is unclear that what the claimed “computer-readable medium” really is or specifically refers to in the specification (also see new matter rejection under 112 1st below), considering the instant application being related to process signal in a communication network (see Summary: page 5), the claimed “computer-readable medium” is broadly interpreted as and/or directed to carrier wave or communication medium, which is non-statutory. It is noted that computer readable medium referring to communication media, carrier wave, transport mechanism, transmission media, wired media, wireless media, signals, does not fall within any one of four statutory categories under 35 U.S.C. 101. Further, the claim referring to communication media such as a carrier wave, as whole, does not produce a useful, concrete, and tangible result in a practical application, because it is nothing more than claiming a signal itself. Therefore, the claim, as whole, is directed to non-statutory subject matter.

7. To expedite a complete examination of the instant application the claims rejection under 35 U.S.C 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 112

8. Claims 17, 19-21 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 17 and 19-21, the limitation of “**a processor** configured to calculate values...” in the claim(s) introduces new subject matter, which is not specifically disclosed by the original specification.

Regarding claim 40, the limitation of “a computer program embodied on a computer-readable medium configured to control a processor to perform...” in the amended claim introduces new subject matter, because the applicant failed to provide the reference(s) where the claimed limitation is fully supported by the original specification and nowhere in the original specification can be found for specifically describing the amended limitation.

Allowable Subject Matter

9. Claims 1-16 and 39 are allowed.

The following is an examiner’s statement of reasons for allowance:

Regarding independent **claim 1 and 39**, the instant application is directed to a method and apparatus for encoding speech signal. Each of the independent claims, combining some well known features in the art, identifies the uniquely distinct features of:

encoding via at least one stage of a transceiver, said encoding being performed to encode a frame using at least one of a plurality of codec modes, wherein said at least one stage comprises:

selecting one group of codec modes from a plurality of groups of codec modes using said calculated values of said parameters, wherein each of said groups of codec modes comprises at least one speech processing algorithm and comprises a common parameter characteristic, wherein the selection is performed according to at least one of prior to calculating a linear prediction coding operation, after calculating a linear prediction coding operation and prior to calculating a long term prediction operation, and after calculating a linear prediction, coding operation and a long term prediction operation; and

encoding the frame with one at least one of the speech processing algorithms from the selected group of codec modes in dependence on said common parameter characteristic.

10. The prior art of record, SU et al. (US 2001/0023395 A1), CHANG et al. (US 6226607) and Yeung et al. (US 2004/0228537), provided numerous teachings and techniques of encoding/decoding speech signal, including adaptively selecting encoding bit rate modes, providing conditional and/or branch processes (groups) for selecting bit rate using parameters

such as LTP mode, voiced/unvoiced, data rate, adaptively selecting a particular encoding scheme (algorithm) based on various parameters and speech signal characteristics, using VAD, multi-stage VQ, LSF and codebook; selecting an encoding process based on the frame parameters such as energy, providing speech classification and mode decision by using different or combined measures for arranging different stages and groups with corresponding encoding modes or bit rates; and providing thresholded value based on target bit rates. However, the combined features stated above are not anticipated by, nor made obvious over the prior art of the record.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to QI HAN whose telephone number is (571)272-7604. The examiner can normally be reached on M-TH:9:00-19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QH/qh
April 22, 2009
/QI HAN/
Primary Examiner, Art Unit 2626